

L Number	Hits	Search Text	DB	Time stamp
1	1	("6143461").PN.	USPAT; US-PGPUB	2003/05/17 17:24
2	1	("6048911").PN.	USPAT; US-PGPUB	2003/05/17 17:24
3	2	ep-921438-\$ did.	EPO; JPO; DERWENT	2003/05/17 17:30
4	1	("5096801").PN.	USPAT; US-PGPUB	2003/05/17 17:32
5	1	("4952478").PN.	USPAT; US-PGPUB	2003/05/17 17:34
6	1	("4310615").PN.	USPAT; US-PGPUB	2003/05/17 17:34
7	0	gb-20044788-\$ DID.	EPO; JPO; DERWENT	2003/05/17 17:35
8	2	gb-2044788-\$ DID.	EPO; JPO; DERWENT	2003/05/17 17:44
9	1	("5641608").PN.	USPAT; US-PGPUB	2003/05/17 17:56
10	1559	LAURYL ADJ PEROXIDE	USPAT; US-PGPUB	2003/05/17 17:56
11	79	LAURYL ADJ PEROXIDE and (photopolym\$)	USPAT; US-PGPUB	2003/05/17 18:29
12	627	aronix	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/05/17 18:29
13	110	aronix same (m315 or m adj "315")	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/05/17 18:50
14	273	430/283.1.ccls. and solid	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/05/17 18:50
15	117	430/283.1.ccls. and solid and allyl	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/05/17 18:55
16	27	430/283.1.ccls. and solid same monomer and allyl	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/05/17 18:51
17	90	(430/283.1.ccls. and solid and allyl) not (430/283.1.ccls. and solid same monomer and allyl)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/05/17 18:55
-	2	ep-924570-\$ did.	EPO; JPO; DERWENT	2003/05/17 17:23
-	1	fr-2001985-\$ did.	EPO; JPO; DERWENT	2003/05/17 12:52
-	1	("5362605").PN.	USPAT; US-PGPUB	2003/05/17 12:52
-	2	jp-02161443-\$ did.	EPO; JPO; DERWENT	2003/05/17 12:55
-	2	jp-02161442-\$ did.	EPO; JPO; DERWENT	2003/05/17 14:36
-	1	("4950580").PN.	USPAT; US-PGPUB	2003/05/17 12:56
-	261719	benzoin same maximum absorption	USPAT; US-PGPUB	2003/05/17 13:14

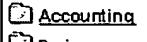
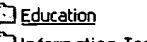
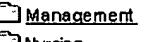
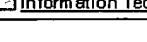
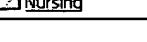
-	12	benzoin same maximum adj absorption	USPAT; US-PGPUB	2003/05/17 13:43
-	108	430/281.1-288.1.ccis. and cold adj flow	USPAT; US-PGPUB	2003/05/17 13:43
-	119	430/281.1-309.ccis. and cold adj flow	USPAT; US-PGPUB	2003/05/17 13:43
-	84	(430/281.1-309.ccis. and cold adj flow) and solid	USPAT; US-PGPUB	2003/05/17 13:44
-	1	ep-48836-\$ did.	EPO; JPO; DERWENT	2003/05/17 14:37
-	1	1982-28918E.NRAN.	DERWENT	2003/05/17 14:37
-	0	wo-48836-\$ did.	EPO; JPO; DERWENT	2003/05/17 14:39
-	0	wo-0048836-\$ did.	EPO; JPO; DERWENT	2003/05/17 14:38
-	0	wo-0048836-\$ did.	EPO; JPO; DERWENT	2003/05/17 14:39
-	0	ioncrys\$5 adj "50"	EPO; JPO; DERWENT	2003/05/17 14:51
-	0	ioncrys\$5 adj "50"	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/05/17 14:51
-	2	ioncrys\$5 adj "683"	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/05/17 14:51
-	2	ioncrys\$5 adj 683\$5	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/05/17 16:16
-	3	2002011165.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/05/17 16:31
-	0	2002011165.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/05/17 16:32
-	0	("2002011165").PN.	USPAT; US-PGPUB	2003/05/17 16:32
-	0	("200211165").PN.	USPAT; US-PGPUB	2003/05/17 16:33
-	370	aoshima.inv.	USPAT; US-PGPUB	2003/05/17 16:34
-	0	"200101165"	USPAT; US-PGPUB	2003/05/17 16:34
-	2	jp-2001324798-\$ did.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/05/17 16:37
-	0	wo-0020926-\$ did.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/05/17 16:37
-	1	ep-1121623-\$ did.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/05/17 16:40
-	1	("6025410").PN.	USPAT; US-PGPUB	2003/05/17 16:41
-	1	("5886136").PN.	USPAT; US-PGPUB	2003/05/17 16:47
-	1	("5080999").PN.	USPAT; US-PGPUB	2003/05/17 16:47

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ben·zyl

(click to hear the word) (bən'zīl, -zēl')

n.

The univalent radical C₆H₅CH₂-, derived from toluene.

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(FILE 'HOME' ENTERED AT 12:42:45 ON 17 MAY 2003)

FILE 'REGISTRY' ENTERED AT 12:42:50 ON 17 MAY 2003

L1 0 S N CYCLOHEXYLACRYLAMIDE/CN
L2 10 S N CYCLOHEXYLACRYLAMIDE
L3 14 S 3066-72-6/CRN
L4 1 S 3066-72-6

FILE 'CA' ENTERED AT 12:44:09 ON 17 MAY 2003

L5 76 S L3 OR L4
L6 14 S L5 AND PHOTO?
L7 71 S COLD FLOW AND PHOTO?
L8 0 S L7 AND L6
L9 6 S L7 AND SOLID
L10 37 S CYCLOHEXYLACRYLAMIDE
L11 3 S L10 AND PHOTO?
L12 0 S L11 NOT L6

=> Log Y

L6 ANSWER 2 OF 14 CA COPYRIGHT 2003 ACS
 AN 135:20669 CA
 TI Radiation-curable resin compositions and their use in spacers of liquid-crystal display devices
 IN Ogasawara, Shoji; Yamada, Kenji; Endo, Masayuki
 PA JSR Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 13 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM G02F001-1339
 ICS C08F002-00; C08F002-44; C08F002-46; C08F257-02; C08F265-00;
 C08F267-00; C08F279-02; C08F283-00; C08F290-06; C08F299-04;
 C08F299-06; C08K003-04; C08K003-22; C08K005-00; C08L051-00;
 G09F009-30
 CC 38-3 (Plastics Fabrication and Uses)
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2001154206	A2	20010608	JP 1999-333642	19991125
PRAI JP 1999-333642		19991125		

AB The compns. comprise (A) copolymers of unsatd. carboxylic acids or/and anhydrides, unsatd. group-contg. epoxy compds. and other unsatd. comonomers, (B) polymers bearing unsatd. groups, (C) radiation polymn. initiators and (D) colorants. Thus, heating styrene 20 with methacrylic acid 16, dicyclopentanyl methacrylate 19, .beta.-methylglycidyl methacrylate 45, .alpha.-methylstyrene dimer 3, AIBN 7, and propylene glycol monomethyl ether acetate 200 parts at 70.degree. for 5 h, and mixing the resulting polymer soln. (solids concn. 33.3%) 100 with Kayarad DPHA 100, Irgacure 369 (initiator) 25, carbon black 7, Disperbyk 182 (dispersant) 2 and .gamma.-glycidoxypropyltrimethoxysilane 5 parts gave a radiation-curable compn. which was spin-coated on a glass surface, dried, photo-mask-patterned with UV light and developed to give a spacer film of 5 .mu.m thickness with good light blocking property and resistance to heat and rubbing.
 ST LCD display device spacer radiation curable resin compn; heat resistance liq crystal display spacer radiation curable resin
 IT Carbon black, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (copolymer; radiation-curable resin compns. and use in spacers of liq.-crystal display devices)
 IT Polymerization catalysts
 (photopolymn.; radiation-curable resin compns. and use in spacers of liq.-crystal display devices)
 IT Heat-resistant materials
 Liquid crystal displays
 (radiation-curable resin compns. and use in spacers of liq.-crystal display devices)
 IT Crosslinking
 (radiochem.; radiation-curable resin compns. and use in spacers of liq.-crystal display devices)
 IT 147-14-8, C.I.Pigment Blue 15:4 4051-63-2, C.I. Pigment Red 177
 RL: MOA (Modifier or additive use); USES (Uses)
 (Pigment; radiation-curable resin compns. and use in spacers of liq.-crystal display devices)
 IT 71868-10-5, Irgacure 907 119313-12-1, Irgacure 369
 RL: CAT (Catalyst use); USES (Uses)
 (polymn. initiator; radiation-curable resin compns. and use in spacers of liq.-crystal display devices)
 IT 264192-15-6P, dicyclopentanyl methacrylate-glycidyl methacrylate-Kayarad DPHA-methacrylic acid-styrene copolymer 307493-95-4P, Dicyclopentanyl methacrylate-Kayarad DPHA-methacrylic acid-.beta.-methylglycidyl methacrylate-styrene copolymer 342904-14-7P 342904-15-8P
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP

(Properties); TEM (Technical or engineered material use); PREP
(Preparation); USES (Uses)
(radiation-curable resin compns. and use in spacers of liq.-crystal
display devices)

L6 ANSWER 21 OF 26 CA COPYRIGHT 2003 ACS
AN 112:28179 CA
TI Photosensitive resin composition for solder mask
IN Tsukada, Katsushige; Hatsutori, Kenji; Tsucha, Katsunori; Fujii, Tadashi
PA Hitachi Chemical Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C08G059-50
ICS C08G059-32; G03C001-68
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 76

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 01174521	A2	19890711	JP 1987-335087	19871228
PRAI	JP 1987-335087		19871228		

AB The title compn. contains (a) an aq. alkali-sol. and water-insol. high-mol. **binder**, (b) an addn. product of triglycidyl isocyanurate and an unsatd. group-contg. monocarboxylic acid at acid/epoxy = 0.9-1.05 (equiv.), (c) an amino resin, and (d) a sensitizer and/or its system creating free radicals under irradn. of active ray. The compn. is useful for manufg. a printed circuit board. Thus, a compn. contg. acrylic acid-TEPIC G (triglycidyl isocyanurate) adduct, APG 700 (polypropylene glycol diacrylate), hexamethoxymethylmelamine, Bu acrylate-Me methacrylate-methacrylic acid copolymer, 2-methyl-1-[4-(methylthio)phenyl]-2-morpholino-1-propanone, 2-isopropylthioxanthone, and 5-amino-1,3,4-thiadiazole-2-thiol was applied onto a Cu-clad laminate, irradiated, alkali-developed, washed, and heated to give a precisely patterned solder mask.

ST photoresist epoxy isocyanurate acrylic resin; solder mask isocyanurate acrylic resin; printed circuit board solder mask; methoxymethylmelamine photoresist solder mask

IT Heat-resistant materials
(photoresist, for solder mask, isocyanurate-contg. acrylic epoxy resins for)

IT Epoxy resins, uses and miscellaneous
RL: USES (Uses)
(acrylic, isocyanurate-contg., for solder mask, for printed circuit board)

IT Acrylic polymers, uses and miscellaneous
RL: USES (Uses)
(epoxy, isocyanurate-contg., for solder mask, for printed circuit board)

IT Resists
(photo-, isocyanurate-contg. acrylic epoxy resins, for solder mask)

IT Electric circuits
(printed, boards, photoresist solder mask for, acrylic isocyanurate-contg. epoxy resin as)

IT 52496-08-9, Polypropylene glycol diacrylate
RL: USES (Uses)
(photoresist from, APG 700, for solder mask, for printed circuit board)

IT 3089-11-0, Hexamethoxymethylmelamine 9003-08-1, Melan 523 25035-69-2
40220-08-4, FA 731A 110279-43-1 115202-60-3, 2-Hydroxyethyl methacrylate-tetrahydrofurfuryl methacrylate-methyl methacrylate-methacrylic acid copolymer 124449-64-5 124449-65-6, Acrylic acid-methacrylic acid-TEPIC S adduct 124517-50-6
RL: USES (Uses)
(photoresist from, for solder mask, for printed circuit board)

IT 90-93-7, 4,4'-Bis(diethylaminobenzophenone) 2349-67-9,
5-Amino-1,3,4-thiadiazole-2-thiol 5495-84-1, 2-Isopropylthioxanthone
71868-10-5, 2-Methyl-1-[4-(methylthio)phenyl]-2-morpholino-1-propanone
76293-13-5, 2,4-Dimethylthioxanthone
RL: USES (Uses)
(sensitizer, for photoresist, for solder mask)

L6 ANSWER 11 OF 26 CA COPYRIGHT 2003 ACS

AN 132:300944 CA

TI Photosensitive resin composition useful as insulating and solder
resist films

IN Satake, Masanori; Takayanagi, Takashi

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM G03F007-027

ICS G03F007-027; C08F002-50; C08F226-06; G03F007-033; C08F222-38;
C08F230-02

CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reproductive Processes)

Section cross-reference(s): 38

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000112121	A2	20000421	JP 1998-284614	19981006
PRAI	JP 1998-284614		19981006		

AB The title resin compn. contains (a) a copolymerd. **binder** contg.
.gtoreq.1 of the each structure unit $(CH_2CR_1R_2)_1$, $[CR_6(CO_2H)CR_7(CONHR_8)]^m$,
and $[CH_2CR_9(CO_2CH_2CH_2OP(:O)(OR_{11})OR_{10})]^n$ $[R_1, R_6, R_7, R_9 = H, C_1-3$ alkyl;
 $R_2 = H$, alkyl, aryl, CO_2R_3 , $CONR_4R_5$ ($R_3-5 = H$, alkyl, aryl); $R_8 =$ alkyl,
aralkyl, aryl; $R_{10}, R_{11} = C_1-6$ alkyl, C_6-12 aryl] in a ratio of 10-60,
20-70, and 5-60 wt.%, resp., (b) a compd. having addn.-polymerizable
ethylenic unsatd. groups in its mol., and (c) a **photopolymer**.
initiator(s). The compn. suited for use in prodn. of printed circuits
shows improved flame-proofing properties, adhesion to metal plating films,
and mech. strength.

ST acryloyl phosphate maleic anhydride styrene copolymer; **photoresist**
acryloyl phosphate copolymer

IT **Photoresists**

(photoresist compn. contg. phosphate polymer)

IT 100-46-9DP, Benzylamine, amides with maleic anhydride copolymer
108-91-8DP, Cyclohexylamine, amides with maleic anhydride copolymer
264199-64-6DP, Styrene-maleic anhydride-MR 260 copolymer, amides
264199-65-7DP, Acryloyloxyethyl diphenyl phosphate-maleic
anhydride-styrene copolymer, amides 264199-67-9DP, Acryloyloxyethyl
diphenyl phosphate-butyl acrylate-maleic anhydride-styrene copolymer,
amides

RL: PNU (Preparation, unclassified); TEM (Technical or engineered material
use); PREP (Preparation); USES (Uses)

(photoresist compn. contg. phosphate polymer)

IT 40220-08-4, Aronix M 315 77641-99-7, Kayarad DPHA 115753-22-5,
Tris(acryloyloxyethyl)isocyanurate 120750-67-6, Kayarad R 712
264199-66-8

RL: TEM (Technical or engineered material use); USES (Uses)

(photoresist compn. contg. phosphate polymer)

L6 ANSWER 15 OF 26 CA COPYRIGHT 2003 ACS
 AN 127:313206 CA
 TI Photosensitive resin composition, photosensitive
 element using it, manufacture of phosphor pattern using the element
 IN Nojiri, Takeshi; Tachiki, Hideyasu; Uehara, Hideaki; Mukai, Ikuo
 PA Hitachi Chemical Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 10 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM G03F007-004
 ICS G03F007-033; G09F009-313; H01J009-227
 CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other
 Reprographic Processes)
 Section cross-reference(s): 73
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 09244230	A2	19970919	JP 1996-50666	19960307
PRAI	JP 1996-50666		19960307		

AB The compn. contains (A) a cryst. vinyl polymer **binder** with
 crystg. temp. 30-120 .degree. manufd. by copolymg. a vinyl monomer
 $\text{CH}_2:\text{CRCO}_2(\text{CH}_2)_n\text{Me}$ ($R = \text{H, Me}$; $n = 12-24$), (B) a thermoplastic polymer
binder, (C) a **photopolymerizable** compd. terminated with
 an ethylenic unsatd. group, (D) a **photoinitiator** which generates
 free radicals by irradiating active energy beam, and (E) a phosphor. The
 element contains the compn.-contg. layer on a support film. The manuf.
 involves (1) adhering the compn. on a barrier rib-formaed plasma display
 substrate, (2) irradiating active energy beam to crosslink an unexposed
 domain, (3) removing the domain by developing, and (4) sintering. The
 compn. is useful for a light-emitting display such as a plasma display
 panel. The element shows prevention of edge fusion and good burying
 property.
 ST **photosensitive** element methacrylate polymer phosphor; vinyl
 polymer **binder** **photosensitive** compn; phosphor pattern
photosensitive element exposing; plasma display panel acrylate
 polymer **binder**
 IT Phosphors
 Photoresists
 Plasma display panels
 (manuf. of phosphor pattern using **photosensitive** resin compn.
 contg. cryst. (meth)acrylate polymer **binder**)
 IT 7439-96-5, Manganese, uses 7440-53-1, Europium, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (activator; manuf. of phosphor pattern using **photosensitive**
 resin compn. contg. cryst. (meth)acrylate polymer **binder**)
 IT 78-67-1, AIBN
 RL: CAT (Catalyst use); DEV (Device component use); USES (Uses)
 (manuf. of phosphor pattern using **photosensitive** resin compn.
 contg. cryst. (meth)acrylate polymer **binder**)
 IT 109-17-1, Tetraethylene glycol dimethacrylate 13597-65-4, Zinc silicate
 $(\text{Zn}_2\text{SiO}_4)$ 15625-89-5, A-TMPT 40220-08-4, FA 731A 52496-08-9,
 APG 400 71012-47-0, Barium magnesium aluminate ($\text{BaMgAl}_14\text{O}_{23}$)
 124676-67-1, Gadolinium yttrium borate [(Gd, Y) BO_3]
 RL: DEV (Device component use); USES (Uses)
 (manuf. of phosphor pattern using **photosensitive** resin compn.
 contg. cryst. (meth)acrylate polymer **binder**)
 IT 27791-81-7P, Acrylic acid-butyl acrylate-methacrylic acid-methyl
 methacrylate copolymer 34306-75-7P, Methacrylic acid-methyl
 methacrylate-stearyl acrylate copolymer 197307-35-0P, Ethyl
 acrylate-methacrylic acid-methyl methacrylate-stearyl acrylate copolymer
 RL: DEV (Device component use); IMF (Industrial manufacture); MOA
 (Modifier or additive use); PREP (Preparation); USES (Uses)
 (manuf. of phosphor pattern using **photosensitive** resin compn.)

RL: DEV (Device component use); IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); PREP (Preparation); USES (Uses)
(polymer binders having chain transfer groups for fireproofing
photocurable elec. insulating resin compns.)

IT 7440-50-8, Copper, properties 25038-59-9, PET polymer, properties
RL: DEV (Device component use); PRP (Properties); USES (Uses)
(polymer binders having chain transfer groups for fireproofing
photocurable elec. insulating resin compns.)

IT 471-34-1, Tunex E, uses
RL: MOA (Modifier or additive use); USES (Uses)
(water-sol. film contg., roughening insulation film surface with;
polymer binders having chain transfer groups for fireproofing
photocurable elec. insulating resin compns.)

IT 9002-89-5, Poly(vinyl alcohol) 9003-39-8, Poly(vinyl pyrrolidone)
9004-65-3, TC 5E
RL: PEP (Physical, engineering or chemical process); POF (Polymer in formulation); TEM (Technical or engineered material use); PROC (Process);
USES (Uses)
(water-sol. film, roughening insulation film surface with; polymer
binders having chain transfer groups for fireproofing
photocurable elec. insulating resin compns.)

L6 ANSWER 5 OF 26 CA COPYRIGHT 2003 ACS

AN 135:108168 CA

TI Polymer binders having chain transfer groups and **photocurable** resin compositions containing them

IN Fujita, Akinori; Wakata, Yuichi; Satake, Masanori

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 17 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C08F010-00

ICS C08F012-00; C08F020-00; C08F022-38; C08L025-00; C08L033-00;
C08L035-00; C08L043-02; G03F007-027; G03F007-033; H05K003-28;
H05K003-46

CC 37-6 (Plastics Manufacture and Processing)

Section cross-reference(s): 38, 76

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001200013	A2	20010724	JP 2000-9018	20000118
PRAI	JP 2000-9018		20000118		

AB The polymer binders, useful for insulators of printed circuit boards, etc., comprise repeating units of 10-80% CH₂CR₁R₂ (R₁ = H, C₁-3-alkyl; R₂ = H, alkyl, aryl, CO₂R₃, CONR₄R₅; R₃-5 = H, alkyl, aryl) and 0.00001-40% CR₆(CO₂H)CR₇(CONHR₉) (R₆, R₇ = H, C₁-3-alkyl; R₉ = alkyl, aralkyl, aryl contg. chain transfer groups). Thus, styrene-maleic anhydride (I)-methacryloyloxyethylidiphenyl phosphate (MR 260) copolymer was reacted with 0.9995 mol (based on 1 mol I) benzylamine and 0.0005 mol (based on 1 mol I) aminoethanethiol, mixed with tris[2-(acryloyloxy)ethyl] isocyanurate (Aronix M 315) and other polyfunctional acrylic monomers (Kayarad DP_{HA}, Kayarad R 712), applied on a PET film, laminated on a Cu-clad board, covered with a microparticle-contg. water-sol. resin film, **photo-cured**, washed with 0.5% sodium bicarbonate aq. soln., and Cu-plated to give a printed circuit board showing adhesion strength of the Cu layer 0.81 kg/cm, breaking strength 720 kg/cm², elongation 14%, and UL 94 fire resistance rating V0.

ST chain transfer **binder photocurable** elec insulator;
benzylamine aminoethanethiol maleic anhydride polymer fireproofing;
acryloyloxyethyl isocyanurate polymer printed circuit board

IT Printed circuit boards
(multilayer; polymer binders having chain transfer groups for fireproofing **photocurable** elec. insulating resin compns.)

IT Binders
Electric insulators
(polymer binders having chain transfer groups for fireproofing **photocurable** elec. insulating resin compns.)

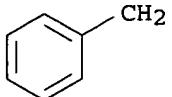
IT Polyesters, properties
RL: DEV (Device component use); PRP (Properties); USES (Uses)
(polymer binders having chain transfer groups for fireproofing **photocurable** elec. insulating resin compns.)

IT 40220-08-4, Aronix M 315 77641-99-7, Kayarad DP_{HA} 120750-67-6,
Kayarad R 712 264199-66-8

RL: MOA (Modifier or additive use); USES (Uses)
(fireproofing **photocurable** elec. insulating resin compns.
comprising polymer binders having chain transfer groups and addn.
polymerizable compds.)

IT 60-23-1DP, reaction products with styrene-maleic anhydride-based polymers 100-46-9DP, Benzylamine, reaction products with styrene-maleic anhydride-based polymers 9011-13-6DP, Maleic anhydride-styrene copolymer, reaction products with benzylamine, aminoethanethiol, and aminocyclohexanethiol 264199-64-6DP, maleic anhydride-MR 260-styrene copolymer, reaction products with benzylamine, aminoethanethiol, and aminocyclohexanethiol 350247-90-4DP, reaction products with styrene-maleic anhydride-based polymers

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS
RN 2154-56-5 REGISTRY
CN Methyl, phenyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Benzyl (6CI, 8CI)
OTHER NAMES:
CN Benzyl radical
CN Phenylmethyl
DR 12552-69-1
MF C7 H7
CI COM
LC STN Files: AGRICOLA, BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT,
CIN, DETHERM*, GMELIN*, IFICDB, IFIPAT, IFIUDB, NIOSHTIC, PIRA, PROMT,
TOXCENTER, USPATFULL
(*File contains numerically searchable property data)



1025 REFERENCES IN FILE CA (1957 TO DATE)
38 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1025 REFERENCES IN FILE CAPLUS (1957 TO DATE)
36 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

AN 86:99090 CA

TI Photosensitive dry transfer material

IN Steelman, Ronald S.; Larkins, Rodney J.

PA Minnesota Mining and Mfg. Co., USA

SO Ger. Offen., 33 pp.

CODEN: GWXXBX

DT Patent

LA German

IC G03C001-90

CC 74-8 (Radiation Chemistry, Photochemistry, and Photographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2551216	A1	19760526	DE 1975-2551216	19751112
	DE 2551216	C2	19841018		
	DE 2551216	C3	19890720		
	CA 1037311	A1	19780829	CA 1975-238453	19751028
	SE 7512264	A	19760514	SE 1975-12264	19751103
	SE 447426	B	19861110		
	SE 447426	C	19870219		
	FR 2291527	A1	19760611	FR 1975-34407	19751112
	FR 2291527	B1	19830401		
	JP 51071124	A2	19760619	JP 1975-136146	19751112
	JP 60009247	B4	19850308		
	AU 7586531	A1	19770519	AU 1975-86531	19751112
	CH 613055	A	19790831	CH 1975-14667	19751112

PRAI US 1974-523430 19741113

AB A light-sensitive dry-transfer element is described which consists of a thin, flexible, transparent film support, a release undercoating, and a light-sensitive top coating composed of an addn. polymerizable, nongas-forming, ethylenically unsatd. compd., a free radical-forming photoinitiator, and a binder. A protective top layer may also be added. After exposure of the material, the nonimage areas are removed and the material is then contacted under pressure with a receptor sheet to transfer the image areas. Thus, a transparent polyester sheet was coated with a dispersion contg. Mold Wiz PS-259 75, Vidax AR 10, polyethylene glycol 0.5, and trichloroethylene 50 g at a dry wt. of 120 mg/929 cm². A light-sensitive layer was then prep'd. by ball-milling Gelva C5V16 8.7, carbon black 1.62, EtOH 9.8, and MeCOEt 17.4 g and adding to a soln. contg. pentaerythritol tetraacrylate 3.5, tris(2-hydroxyethyl) isocyanate triacrylate 11.9, Daraktak 74L 12.9, Pycal 94 1.9, FC-430 0.24, 2-(p-methoxystyryl)-4,6-bis(trichloromethyl)-s-triazine 0.42, and MeCOEt 31.0 g, and then coated on the release layer of the support at a dry wt. of 2.5 g/929 cm². A top coating composed of Gelvatol 20-30 78, water 70, and MeOH 23 g was added. The finished material was then exposed through a neg., developed with a 1% aq. Na silicate, and then contacted with a receptor sheet under pressure to transfer the developed image.

ST photosensitive dry transfer sheet

IT Rubber, silicone, uses and miscellaneous

Silica gel, uses and miscellaneous

Siloxanes and Silicones, uses and miscellaneous

RL: USES (Uses)

(coatings, release, for photosensitive dry transfer materials)

IT Acrylic polymers, uses and miscellaneous

Carbon black, uses and miscellaneous

Rubber, polysulfide

RL: USES (Uses)

(photosensitive compns. contg., for dry transfer sheet)

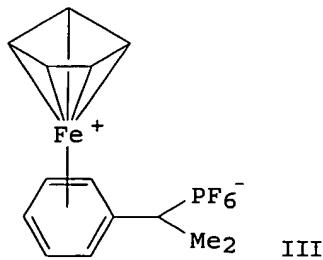
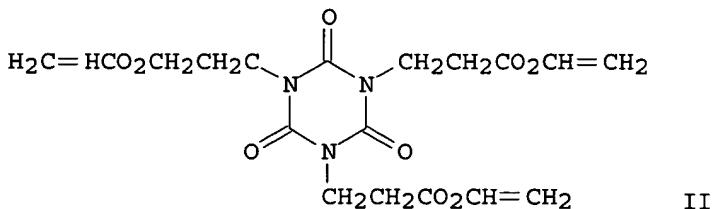
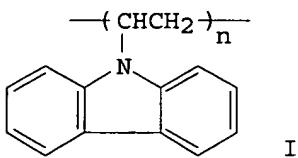
IT Vinyl acetal polymers

RL: USES (Uses)

(butyral, photosensitive compns. contg., for dry transfer sheet)

IT Transfers
(dry, **photosensitive** materials for)
IT 9004-62-0
RL: USES (Uses)
(coatings, protective, for **photosensitive** dry transfer sheet)
IT 9004-67-5 25322-68-3 60476-58-6 62046-62-2
RL: USES (Uses)
(coatings, release, for **photosensitive** dry transfer
materials)
IT 84-11-7 131-56-6 2395-97-3 3290-92-4 4392-68-1 4986-89-4
8047-99-2 9004-36-8 9041-09-2 11114-17-3 25154-86-3 25322-68-3
25609-89-6 28158-16-9 40220-08-4 42573-57-9 53124-92-8
57904-03-7 62046-54-2 62046-59-7
RL: USES (Uses)
(**photosensitive** compns. contg., for dry

L5 ANSWER 21 OF 27 CA COPYRIGHT 2003 ACS
AN 116:265701 CA
TI Holography photosensitive material containing methacrylate compound
IN Sugawara, Satoko
PA Nissan Motor Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM G03H001-02
 ICS G03F007-027; G03F007-029; G03F007-033
CC 74-8 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
FAN.CNT 1
PATENT NO. KIND DATE APPLICATION NO. DATE
----- ----- ----- -----
PI JP 04013172 A2 19920117 JP 1990-115277 19900502
PRAI JP 1990-115277 19900502
GI



AB The material contains poly(vinyl carbazol) binder I ($n = 600,000-1,000,000$), methacrylate compd. II, and Fe-arene complex polymg.-initiator. The material may contain ketocoumarin dye sensitizer. The material was suitable for film formation.

ST holog photosensitive methacrylate; arene iron polymn initiator
photosensitive holog; coumarin sensitizer photosensitive
holog

IT Holography
(photosensitive materials for, contg. methacrylate and
iron-arene polymn.-initiator)

IT 25067-59-8

RL: USES (Uses)

(Photosensitive holog. material binder)
IT 42033-33-0
RL: USES (Uses)
(photosensitive holog. material contg.)
IT 32760-74-0
RL: USES (Uses)
(polymn. initiator, photosensitive holog. material contg.)
IT 63226-13-1
RL: USES (Uses)
(sensitizer, photosensitive holog. material contg.)

L5 ANSWER 13 OF 19 CA COPYRIGHT 2003 ACS
 AN 108:205782 CA
 TI Thermosetting compositions
 IN Nakajima, Hiroyuki; Miyamoto, Fumiyuki; Oka, Seiji; Doi, Makoto; Chidai, Hideki
 PA Mitsubishi Electric Corp., Japan
 SO Jpn. Kokai Tokkyo Koho, 9 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM C08F297-02
 CC 37-6 (Plastics Manufacture and Processing)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 63015812	A2	19880122	JP 1986-162534	19860708
PRAI	JP 1986-162534		19860708		
AB	Thermosetting compns. with low viscosity and long pot life, useful for impregnation, and giving cured products with good mech. strengths are prep'd. from 5-200 parts compds. contg. .gtoreq.3 (meth)acrylic or allyl groups, 30-150 parts liq. cyclic acid anhydrides, and 100 parts reaction products from carboxy-terminated polybutadienes (.gtoreq.50 mol% 1,2-linkage) and epoxy compds. at epoxy/carboxy equiv. ratio 1.2-15. Thus, mixing 530 parts Nisso-PB-C1000 (carboxy-terminated polybutadiene) and 760 parts Epikote 828 at 150.degree. for 2 h gave an epoxy-modified polybutadiene, 100 parts of which was then mixed with tris(hydroxyethyl) isocyanurate triacrylate 150, phenoxy resin (no-av. mol. wt. 45000) 108, HN-2200 50, styrene 100, di-tert-Bu peroxide 2, and Zn octanoate 1 part to give a compn. with initial viscosity 100 cP (at 25.degree.) and pot life >6 mo, vs. >1 mo for 100:85 Epikote 828-HN 2200. Heating the compn. at 110.degree. for 5 h and 150.degree. for 16 h gave a cured product showing flexural strength 11.5 kg/mm ² , wt. loss after 16 days at 200.degree. 1.0% and dielec. tangent at 100.degree. <1%.				
ST	thermoplastic polybutadiene epoxy resin blend; pot life polybutadiene epoxy resin; acrylate blend polybutadiene epoxy resin; anhydride blend polybutadiene epoxy resin				
IT	Epoxy resins, uses and miscellaneous				
	RL: USES (Uses) (phenoxy, thermosets contg. epoxy-modified polybutadienes and cyclic acid anhydrides and vinyl compds. and, for impregnation with good workability)				
IT	Epoxy resins, uses and miscellaneous				
	RL: USES (Uses) (polybutadiene-, block, thermosets contg. cyclic acid anhydrides and vinyl compds. and, for impregnation with good workability)				
IT	Plastics				
	RL: USES (Uses) (thermosetting, reaction products of carboxy-terminated polybutadienes and epoxy resins and vinyl compds and cyclic acid anhydrides, for impregnation with good workability)				
IT	100-42-5, Styrene, uses and miscellaneous 2694-54-4 40220-08-4				
	RL: USES (Uses) (thermosets contg. epoxide-modified polybutadienes and cyclic acid anhydride and, for impregnation with good workability)				
IT	25013-15-4, Vinyltoluene				
	RL: USES (Uses) (thermosets contg. epoxide-modified polybutadienes and cyclic acid anhydrides and, for impregnation with good workability)				
IT	38497-16-4, HN-2200				
	RL: USES (Uses) (thermosets contg. epoxide-modified polybutadienes and vinyl compds. and, for impregnation with good workability)				
IT	102135-69-3, EOCN 1025				
	RL: USES (Uses)				

(thermosets contg. epoxy-modified polybutadienes and cyclic acid anhydrides and vinyl compds. and, for impregnation with good workability)

IT 25068-38-6D, Epikote 828, reaction products with carboxy-terminated polybutadiene 25085-99-8D, DER 332, reaction products with carboxy-terminated polybutadiene

RL: USES (Uses)

(thermosets contg. vinyl compds. and cyclic acid anhydrides and, for impregnation with improved workability)

contg. cryst. (meth)acrylate polymer binder)